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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/813,415	03/21/2001	Mark Dilman	1-6	2405
46363 7590 02/08/2007 PATTERSON & SHERIDAN, LLP/ LUCENT TECHNOLOGIES, INC 595 SHREWSBURY AVENUE SHREWSBURY, NJ 07702			EXAMINER BILGRAMI, ASGHAR H	
			ART UNIT 2143	PAPER NUMBER
SHORTENED STATUTORY PERIOD OF RESPONSE		MAIL DATE	DELIVERY MODE	
3 MONTHS		02/08/2007	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

# Office Action Summary

Application No.

09/813,415

Applicant(s)

DILMAN ET AL.

Examiner

Asghar Bilgrami

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 22 December 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1 and 6-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 6-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 21 March 2001 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## DETAILED ACTION

### *Claim Rejections - 35 USC § 112*

1. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1, 7, 8, 9, 10 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification does not provide a clear description of a resource and a node. Additionally the specification does not distinguish between nodes and resources. Since the terms node and recourse are not clearly defined in the specification therefore one in the ordinary skill in the art cannot determine in light of the specification which term depends on the other or whether that are the same entity.

2. Claims 9 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it

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pertains, or with which it is most nearly connected, to make and/or use the invention.

The specification does not define the budget and the budget value.

3. Claims 9 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. The specification does not disclose how a global resource can be partitioned into a plurality of node resources.

#### ***Claim Objections***

4. Claim 1, 7, 8, 9, 10 objected to because of the following informalities: Since the terms node and recourse are not clearly defined in the specification therefore one in the ordinary skill in the art cannot determine in light of the specification which term depends on the other or whether that are the same entity. Appropriate correction is required.

***Claim Rejections - 35 USC § 103***

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 1, 6-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Mandel et al (U.S. 6,170,009) and Robinson et al (U.S. 6,570,867).

7. As per claims 1 & 7 Mandal disclosed a method for monitoring usage of resources allocated to a plurality of nodes of a network (col.1, lines 53-67 & col.2, lines 1-7) comprising the steps of (a) assigning to a node, a parameter indicative of a rate of change of usage of said resources, (b) locally monitoring at the node the rate of change of the usage of said resources (col.3, lines 45-54 & col.4, lines 1-14); (c) reporting to a centralized management station of the network when the rate of change of the usage exceeds a first predetermined threshold (col.3, lines 54-67). However Mandal did not explicitly disclose initiating a global poll of resources of at least one other node from the plurality of nodes of the network by the centralized management station in response to reporting from the node.

In the same field of endeavor Robinson disclosed initiating a global poll of resources of at least one other node from the plurality of nodes of the network by the centralized

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management station in response to reporting from the node (col.2, lines 60-67, col.3, lines 1-12, col.5, lines 3-55, col.12, lines 26-44 & col.13, lines 46-58).

It would have been obvious to one in the ordinary skill in the art at the time the invention was made to have incorporated central management station initiating a poll of resources of at least one node in response to the reporting from the node disclosed by Robinson in a method of monitoring usage of resources in nodes of a network as disclosed by Mandal in order to improve the management and monitoring of paths and routes available in a network resulting in a more stable and robust network for users.

8. As per claim 6 Mandal-Robinson disclosed the method of claim 1, further including the step of adjusting the usage of the resources in the node (Mandal col.6, lines 1-27).

9. As per claim 8 Mandal disclosed a method of monitoring usage of resources in nodes of a network (col.1, lines 53-67 & col.2, lines 1-7), comprising the steps of: asynchronous reporting of an event to a management station of the network of an event when a rate of change of a usage of at least one resource of said resources in any of said node deviates from a prescribed norm (col.3, lines 1-67 & col.4, lines 1-14). However Mandal did not explicitly disclose periodic polling of the said nodes in accordance with a polling interval, and a periodic polling of said nodes in response to reporting of said event, wherein a tunable parameter is adjusted in response to the usage. In the same field of endeavor Robinson disclosed periodic polling of the said

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nodes in accordance with a polling interval, and a periodic polling of said nodes in response to reporting of said event node (col.2, lines 60-67, col.3, lines 1-12, col.5, lines 3-55, col.12, lines 26-44 & col.13, lines 46-58), wherein a tunable parameter is adjusted in response to the usage (col.7, lines 59-64).

It would have been obvious to one in the ordinary skill in the art at the time the invention was made to have incorporated central management station initiating a poll of resources of at least one node in response to the reporting from the node disclosed by Robinson in a method of monitoring usage of resources in nodes of a network as disclosed by Mandal in order to improve the management and monitoring of paths and routes available in a network resulting in a more stable and robust network for users.

10. As per claims 9 & 10 Mandal disclosed a technique for managing a global resource of a network in order to reduce the amount of monitoring related traffic, comprising the steps of partitioning the global resource into a plurality of node resources, wherein each node resource is assigned to a separate node of the network, assigning a budget to each said node resource; reporting to a management station of the network when a node exceeds the assigned budget, as determined using local monitoring to the node resource. However Mandal did not explicitly disclose initiating a poll by the management station of node resource usage by the nodes of the network in response a determination that a sum of previously reported budget values received from reporting nodes plus an upper bound of budget values for non-reporting nodes exceeds a threshold; and generating an alarm if the sum of the currently reported

budget values, received in response to the poll initiated by the management station of the reporting nodes exceeds the threshold.

In the same field of endeavor Robinson disclosed initiating a poll by the management station of node resource usage by the nodes of the network in response a determination that a sum of previously reported budget values received from reporting nodes plus an upper bound of budget values for non-reporting nodes exceeds a threshold; and generating an alarm if the sum of the currently reported budget values, received in response to the poll initiated by the management station of the reporting nodes exceeds the threshold. (col.2, lines 60-67, col.3, lines 1-33, col.5, lines 3-12, col.12, lines 26-44 & col.13, lines 46-58).

It would have been obvious to one in the ordinary skill in the art at the time the invention was made to have incorporated initiating a poll of resources of at least one node when assigned budget is exceeded as disclosed by Robinson in a technique for managing a global resource of a network as disclosed by Mandal in order to improve the management and monitoring of paths and routes available in a network resulting in a more stable and robust network for users.

11. As per claim 11 Mandal-Robinson disclosed the method defined in claim 8 wherein said nodes are selected from the group consisting of routers, switches, bridges and firewall devices (Mandal col.7, lines 29-39).



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12. As per claim 12 Mandal-Robinson disclosed the method defined in claim 8 wherein said nodes are selected from the group consisting of servers, hosts, and layer 4-7 switches (Mandal col.2, lines 66-67 & col.3, lines 1-12).

13. As per claims 13 & 14 Mandal-Robinson disclosed the method comprising: (e) summing all the reported rate of change of the usage of the resources; and (e) generating an alarm if the sum exceeds a second threshold, else updating a time interval (Robinson, col.4, lines 52-56 & col.5, lines 31-55).

#### ***Response to Arguments***

14. Applicant's arguments filed 06/30/2006 have been fully considered but they are not persuasive.

15. Applicant argued that neither Mandel nor Robinson disclose assigning a node parameter indicative of a rate of change of usage of said resource, locally monitoring, at the node, the rate of change of the usage of the resources.

16. As to applicant's argument the specification does not disclose a clear description of a resource therefore examiner has made the broadest interpretation of what a resource and in this case it is bandwidth which is disclosed by Mandal. Applicant describes rate of change on page 9 in the context as at each time  $t$ , a determination is made as to whether the rate of change on the monitored variable at any node exceeds a fixed amount. In the same context Mandal describes a policy in which a network

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management system should allow no more than 30% of total bandwidth for video.

Therefore in order to implement such policy it has to monitor at periodic times (col.6, lines 1-27) the rate of change of a parameter against a certain threshold, which is 30% in this example (please read col.3, lines 45-67).

17. Applicant argued that neither Mandel nor Robinson disclose the newly amended claim limitations.

18. As to applicant's arguments, please read examiner's rejection.

### ***Conclusion***

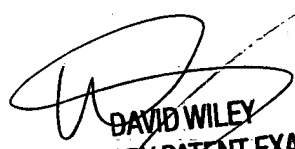
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Asghar Bilgrami whose telephone number is 571-272-3907. The examiner can normally be reached on 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Wiley can be reached on 571-272-3924. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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AB

  
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